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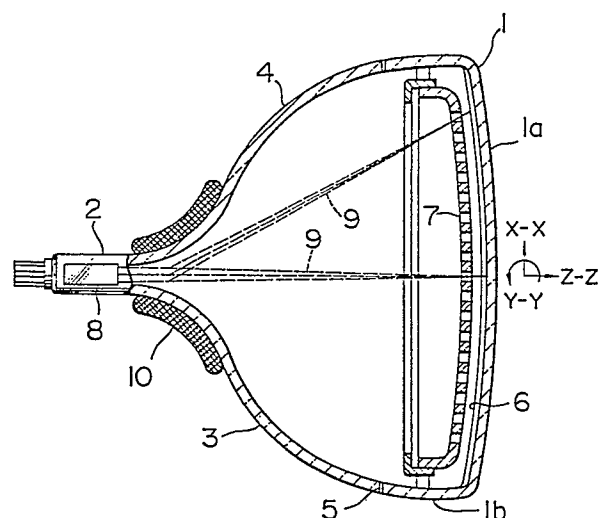
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54 **Color picture tube of shadow mask type.**

57 A color picture tube of shadow mask type includes a faceplate panel (1a) mounted on the tube (3;2). The faceplate panel has curvatures along its major and minor axes, respectively. When the outer surface contour of the faceplate panel is represented by a three-dimensional expression in the orthogonal coordinate system defined by the X-axis corresponding to the major axis, the Y-axis corresponding to minor axis, and the Z-axis corresponding to the axis (Z-Z) of the tube, respectively, curved contours Z_x and Z_y of the faceplate panel along the major axis and the minor axis are so realized as to be approximated by $Z_x = A_1X^2 + A_2X^4$ and $Z_y = A_3Y^2 + A_4Y^4$, respectively, where X and Y represent distances from the center of the faceplate panel along the X-axis and the Y-axis, respectively, and wherein the constants A_1 , A_2 , A_3 and A_4 are so selected that the conditions that $0.3 \leq P_x(X = X_1) \leq 0.6$ and $0.95 \leq P_y(Y = Y_2) \leq 1.0$ where $P_x = A_1X^2/(A_1X^2 + A_2X^4)$, $P_y = A_3Y^2/(A_3Y^2 + A_4Y^4)$ are satisfied at points X_1 and Y_2 on the boundaries defining an effective picture area on the faceplate. Further, the contours of the effective picture area defining boundaries extending in parallel with short and long sides of the outer surface of the faceplate panel are so curved as to have approximately equal curvature, the radius R (mm) of which on the boundary is so selected as to satisfy the condition that $1.5 (42.5V + 45.0) \leq R \leq 2.0 (42.5V + 45.0)$, where V

represents the diagonal length of the effective picture area.

FIG. 1





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DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)		
A,D	GB-A-2 147 142 (R.C.A.) * Page 1, lines 50-54; page 2, lines 29-37, 48-59, 119-129; page 3, lines 10-34; figures 3, 4, 5 * ---	1, 3-5	H 01 J 29/86		
A,D	GB-A-2 136 198 (R.C.A.) * Page 2, lines 94-121; page 3, lines 11-14; figure 7 * -----	1-3			
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)		
			H 01 J 29/00		
The present search report has been drawn up for all claims					
Place of search THE HAGUE		Date of completion of the search 06-06-1989	Examiner ROWLES K. E. G.		
<table><tr><td>CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</td><td>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</td></tr></table>				CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document
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